



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,684	03/20/2001	Ron Dembo	13408.00007	1100
1059	7590	01/04/2006	EXAMINER	
BERESKIN AND PARR 40 KING STREET WEST BOX 401 TORONTO, ON M5H 3Y2 CANADA			DASS, HARISH T	
			ART UNIT	PAPER NUMBER
			3628	
DATE MAILED: 01/04/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/811,684	Applicant(s) DEMBO ET AL.	
	Examiner Harish T. Dass	Art Unit 3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/17/05</u> . | 6) <input checked="" type="checkbox"/> Other: <u>Attachment A</u> . |

Art Unit: 3628

DETAILED ACTION

Examiner notice an typographical error with respect to the leading rejection paragraph under 35 U.S.C. 103(a). The rejection paragraph under 35 U.S.C. 103(a) should be read:

Claims 1-10, 15-16, 18-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dembo (US 5,148,365) in view of Moor et al (herein after Moore; US 5,446,885), Tull, Jr. et al (hereinafter Tull, Jr. - US 6,092,056), Ohata et al (herein Ohata; US 5,864,857) and Admitted Prior Art (APA).

Please, refer to the previous office action (mailed on 11/18/2004) the rejection of claims 1, 15-16, 18-20, 24-29 on page 10 lines 11-13 which reads "immediate application's specification ..." refers to APA.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10, 15-16, 18-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dembo (US 5,148,365) in view of Moor et al (herein after Moore; US 5,446,885), Tull, Jr. et al (hereinafter Tull, Jr. - US 6062056), Ohata et al (herein Ohata; US 5,864,857) and Admitted Prior Art (APA).

Re. Claims 1 15-16, 18-20, 24-29 Dembo discloses - selecting a set of financial instruments (options or securities), each financial instrument (option) in said set having a model defined therefore, each model operating on at least one risk factor to produce a value for said financial instrument (option), - selecting a set of scenarios, each scenario comprising a risk factor value for each risk factor operated on by said models of said financial instruments (options) at least a first and second time interval and each scenario having a probability value assigned thereto, said probability value representing the likelihood of said scenario occurring and - at least one risk engine (*processing software*) operable to determine an instrument risk value (risk exposure) for each financial instrument in said set of financial instruments, said risk value determined by evaluating, in view of said risk factors values in each said scenario and at each of at least a first and second time interval, a model stored for said instrument [see entire document particularly, Abs; C1 L4-L67; C2 L43 to C3 L12; C4 L50 to C5 L12; C8 L27-L67; Claims],

(15) step of modifying said set of scenarios to change at least one risk factor value and performing steps (iii) through (v) to produce a new risk metric [C1 L4-L67; C2 L43 to C3 L12; C4 L50 to C5 L12; C8 L27-L37],

(16) said at least one risk factor value is changed such that said value does not change with time [C1 L4-L67; C2 L43 to C3 L12; C4 L50 to C5 L12; C8 L27-L67], and

databases which store information for options (options are financial instruments), risk engine (*processing software*), [C1 L4-L67; C2 L43 to C3 L12; C4 L50 to C5 L12; C8 L27-L67;].

Dembo, explicitly, does not disclose, - *applying* said selected set of scenarios to said set of financial instruments to produce at least one instrument risk value for each financial instrument in said set of financial instruments for each scenario in said set of scenarios for each time interval, and *applying* said selected set of scenarios to said portfolio to produce an instrument risk value for each financial instrument in said portfolio for each scenario in said set of scenarios for each time interval;

(iv) storing first instrument risk values produced at step (iii) in a database residing on at least one computer, wherein at least a subset of said first instrument risk values comprises mark-to-future values, said database organized as a multi-dimensional structure wherein one axis of said structure represents financial instruments, another axis of said structure represents scenarios and another axis of said structure represents time intervals. wherein the at least one first instrument risk value associated with the respective financial instrument. scenario, and time interval are stored in said structure, and

- for a portfolio of instruments comprising at least a subset of said set of financial instruments, producing a desired risk metric, producing a first measure of said at least one risk metric, wherein said producing step is performed by at least one aggregation engine adapted to retrieve for each financial instrument in said portfolio, stored instrument

Art Unit: 3628

risk values for each scenario in said set of scenarios for each time interval from said database;

sum said retrieved instrument risk values at each scenario at each time interval to produce aggregated risk values for said portfolio; and compute said desired risk metric using said aggregated risk values for said portfolio.

(18) step of storing said produced risk metrics in said database

(19) the step of determining a credit exposure risk for at least one first party who is counter party for at least one of said financial instruments in said set of financial instruments, determining a subset of said set of financial instruments for which said first party is the counter party and determining the credit exposure for said first party by retrieving said stored values and said associated probabilities from said database.

- producing a second measure of said at least one risk metric, wherein said producing step at step (vi) is performed by said at least one aggregation engine further adapted to combine associated probabilities and said additional instrument risk values for said altered financial instruments with said stored instrument risk values for unaltered financial instruments in said set of financial instruments retrieved from said database to a compute said second measure of said at least one risk metric, and

- for each financial instrument in said set of financial instruments affected by said proposed transaction, altering each said affected financial instrument in accordance with said proposed transaction and applying said selected set of scenarios to each altered financial instrument to produce one or more additional instrument risk values for

each altered financial instrument for each scenario in said set of scenarios for each time interval;

(25) wherein said additional instrument risk values for said altered (updated) financial instruments are stored in said database.

(26) wherein said proposed transaction comprises altering the amount of at least one financial instrument in said set of financial instruments,

(27) wherein said proposed transaction comprises adding a financial instrument to said set of financial instruments.

(28) wherein steps (v) and (vi) are performed for a second proposed transaction and said second measure of said at least one risk metric is produced for each of said proposed transactions.

Regarding "(iv) storing first instrument risk values produced at step (iii) in a database residing on at least one computer, wherein at least a subset of said first instrument risk values comprises mark-to-future values, said database organized as a multi-dimensional structure wherein one axis of said structure represents financial instruments, another axis of said structure represents scenarios and another axis of said structure represents time intervals. wherein the at least one first instrument risk value associated with the respective financial instrument. scenario, and time interval are stored in said structure" the immediate application's specification of pages 7 line 1 to page 8 line 31, this is a prior art. Particularly, in page 8 lines 2-14, these multiple axis are defined as portfolio "P" (instrument "I"), risk "V", scenario "s" and time "T". further,

Art Unit: 3628

the above quoted limitations are disclosed by Ohata [[Abs; C1 L5 to C4 L37; C9 L1-L67; C12 L45 to C13 L5] to manage multi-dimensional data.

However, Moore discloses *applying* said selected set of scenarios to said set of financial instruments to produce a risk value for each financial instrument in said set of financial instruments for each scenario in said set of scenarios for each time interval, storing in a database each financial instrument risk value produced for each financial instrument in said set, and for a portfolio of financial instruments comprising at least a subset of said set of financial instruments, producing a desired risk metric from said associated probabilities and said determined risk values for each financial instrument of said portfolio by retrieving said stored risk values from said database, and step of storing said produced risk metrics in said database and step of determining a credit exposure risk for at least one first party who is counter party for at least one of said financial instruments in said set of financial instruments, determining a subset of said set of financial instruments for which said first party is the counter party and determining the credit exposure for said first party by retrieving said stored values and said associated probabilities from said database and risk engine (GRMS – Global Risk Management system) [Abs; figures 1-7; C1 L8 to C2 L49; C3 L8-L27; C3 L48-L63; C4 L19-L36; C14 L7-L12; C30 L25 to C31 L47].

Further, Tull, Jr. discloses - storing instrument risk values produced at step (iii) in a database, a database to store each said determined instrument risk value and storing in a database each instrument risk value produced at step (ii); [(1-v)(24-iv)(20-c) for a portfolio of instruments comprising at least a subset of said set of financial instruments,

Art Unit: 3628

producing a desired risk metric, producing a first measure of said at least one risk metric, wherein said producing step is performed by at least one aggregation engine (mathematical programming) adapted to retrieve for each financial instrument in said portfolio, stored instrument risk values for each scenario in said set of scenarios for each time interval from said database; sum said retrieved instrument risk values at each scenario at each time interval to produce aggregated risk values for said portfolio; and compute said desired risk metric using said aggregated risk values for said portfolio [Abstract; figures 1, 7; C3 L18 to C4 L63; C7 L1 to C9 L67; C13 L27 to C65; C19 L19 to C27]. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to modify the teaching of Dembo and include a system and applications of produce set of risk values, store the values in database and retrieve the values from database to reuse, as taught by Moore, Tull, Jr. and Ohata, to tabulate the risk values calculated for different set of parameters for distribution and future use and to provide data processing means for determining a price for a basket of shares and fast processing of multiple dimension database.

Furthermore, it is well known of one of ordinary skill in the art of statistics and probability math that computing probabilities of events in finite sample is often greatly simplified by use of rules for permutations and combinations. Furthermore wherein said proposed transaction comprises altering the amount of at least one financial instrument in said set of financial instruments, wherein said proposed transaction comprises adding a financial instrument to said set of financial instruments, and wherein steps (v) and (vi) are performed for a second proposed transaction and said second measure of said at

Art Unit: 3628

least one risk metric (table or spread sheet) is produced for each of said proposed transactions are business decisions and making a spread sheet (tables) with different evaluation (calculation, numbers, updates) are not an inventive idea and it is used in every business, engineering and industrial analysis to compare differences between different set of analysis with different criteria and assumption for the same problem. The examiner takes official notice that he has done many engineering analysis in area of instrumentation & control, failure mode analysis, risk assessment and procurement of equipment.

Re. Claim 2, Dembo does not disclose the step of defining whether each instrument risk value produced is stored in step (iv) as an individual instrument risk value or is aggregated with at least one other financial instrument value and stored as an aggregated value. However, Moore discloses defining rules, storing data separately, or aggregated [Abs; C1 L8 to C2 L50; C5 L48 to C6 L15; C17 L57-L62; C24 L37-L63; C30 L25-L67]. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to modify the teaching of Dembo and include define values as individual or aggregate, as taught by Moore, to tabulate appropriate values for situation and scenario.

Re. Claim 3, Dembo discloses where in step (v), said user first selects a subset of financial instruments of interest from said set of financial instruments and said desired risk metric is produced for said subset by retrieving determined risk values for

Art Unit: 3628

each financial instrument in said subset from said database [Abs; C1 L6-L18; C2 L57 to C3 L55].

Re. claims 4-10 & 17, Dembo discloses (17) step of selecting a first subset of said set of financial instruments and determining a risk metric and selecting a second subset of said financial instruments wherein at least one financial instrument in said first subset is replaced with another financial instrument, and performing steps (iii) through (v) produce a new risk metric [C1 L4-L67; C2 L43 to C3 L12; C4 L50 to C5 L12; C8 L27-L37]. Dembo, explicitly, does not disclose:

(4) where risk factor values for each said risk factor are also stored in said database.

(5) wherein definitions of portfolios of financial instruments stored in said database are predefined,

(6) wherein said definitions of portfolios are stored in said database, and

(7) where steps (iii), a check is first performed to determine if corresponding risk values for an instrument are already present in said database and risk values are only produced for those not already present,

(8) wherein step (iii) and (v) are performed in parallel (processing modules) on subsets of said set of financial instruments,

(9) where step (v) is performed by at least two users (workstations), each of said at least two users producing a risk metric for a different selected subset of said set of

Art Unit: 3628

financial instruments, and (10) where step (v) is performed in parallel by each of said at least two users.

However, Moore discloses such steps [C1 L8 to C2 L50; C13 L24-L60; C17 L45 to C18 L23]. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to modify the teaching of Dembo and include storing values, definitions in database and checking if the value already exists, as taught by Moore, to save time, a common practice in business, computer and engineering such as developing tables, checking ID and password, etc. In communication, control and business multiprocessing (multithreads) are commonly known and all of known operating systems support parallel processing, and it is well known that commonly used NT platform is used by many users (workstations) and users (two, three, ...) can use the same software application at the same time (e.g. WORD).

Re. Claims 21-22, Dembo discloses a risk management system according to claim 20 wherein said risk engine further comprises a user interface to allow a user to define a portfolio of financial instruments for said aggregating engine to operate on, and wherein defined portfolios are stored in said database. [C8 L12-L25; C16 L27-L37].

Re. Claim 23 Dembo, explicitly, does not disclose least two risk engines, each of said at least two risk engines operating in parallel to produce instrument risk values for a subset of said set of financial instruments. However, Moore discloses such steps [C15 L53-59]. It would have been obvious to one of ordinary skill in the art at the time the

Art Unit: 3628

Applicant's invention was made to modify the teaching of Dembo and include several risk engines (GRMS) operating in parallel, as taught by Moore, to add redundancy in case one system fails the user switch to next system. It is well known that most of DB systems are redundant and synchronized in recover data in case one of the database engines fails.

Re. Claims 12-14 Ohata further discloses wherein data is read from and written to said database in multi-dimensional groupings, wherein said grouping includes a selected amount of adjacent data from each of said axes of said structure, wherein said selected amount of adjacent data on a first axis differs from said selected amount of data on a second axis, and wherein the total size of storage required for said multi-dimensional groupings does not exceed a preselected size [Abs; C1 L5 to C4 L37; C9 L1-L67; C12 L45 to C13 L5]. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to modify the teaching of Dembo and include processing and storing multi-dimension data, as taught by Ohata, to pair the data and store them on a page for fast retrieval.

Response to Arguments

2. Applicant's arguments filed 5/16/2005 have been fully considered but they are not persuasive.

In response to applicant's argument about Oath/Declaration, Applicant remarks are noted and Applicant is required to rectify this objection. Examiner has attached a

copy of the oath/declaration which shows hand marks. Applicant's attention is directed to page 1 of the Oath that includes an alteration of customer names and #.

In response to applicant's argument about Claim Rejection of claim 29 under 35 USC § 101, is withdrawn.

In response to applicant's argument about Claim Rejection of claims 1-10, 12-29 under 35 USC § 112 is withdrawn.

In response to applicant's argument (remark page 11-13), page 10 of last office action (paper # 20041114, mailed 11/18/04), refers to page 7-1 to page 8 line 13 which is Admitted Prior Art (Dembo Appl. # 09/811,684 or Pub. No. US 2001/0011243 A1). Admitted Prior Art in page 1 lines 10-23 discloses RiskWatch V3.1.2 as a prior art which evaluates user's portfolio having a three dimension data points associated with it ("time interval" line 14, "each scenario" line 13, "risk value of the instruments" line 15 and "assigned probability"). It is obvious that each scenario has multiple data points and these data point can be tabulated in multiple columns table or can be stored in multi-dimension database such as disclosed by Ohata et al (US 5,864,857). For example, Ohata et al (Figures 3, 7; col. 1 lines 11-17; col. 5 lines 22-67; col. 8 line 41 to col. 9 line 4) discloses analysis of sales of goods at different "periods" (time interval) and the data is stored in multi-dimension database which can be retrieved later for data analysis (see col. 5 lines 43-44, index data to be analyzed are named variables.) Since database stores data point, these points can be any format or data type (database inherent data type). The three dimension data structure of Ohata et al (Figure 3) can have any variable name and data type (sale value=value, period=interval, and market=scenario).

In response to applicant's argument (remark page 13) that Ohata et al is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case the three dimension data structure of Ohata et al (Figure 3) can have any variable name and data type (sale value=value, period=interval, and market=scenario).

In response to applicant's argument that combination In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Ohata et al database management system is to store and retrieve data at high speed efficiently and indexed data for analyzing (col. 1 lines 5-18, col. 5 lines 41-67). In this case of Moor et al Global Risk Management system is a rule management system which allow one to calculate exposure and probable loss for various products (portfolios) in various states based on set of risk factors. In this case of Tull, Jr., it provided ability to provide financial risk managing and analysis.

Art Unit: 3628

In response to applicant's argument (remark page 14 "the need to mosaic at least four distinct references ...") that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 3628


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harish T. Dass whose telephone number is 571-272-6793. The examiner can normally be reached on 8:00 AM to 4:50 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Harish T Dass
Examiner
Art Unit 3628

12/26/05


HYUNG SOUGH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

COMBINED DECLARATION AND POWER OF ATTORNEY
FOR PATENT APPLICATION
(Page 1)

Attachment A

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled **RISK MANAGEMENT SYSTEM, DISTRIBUTED FRAMEWORK AND METHOD**, the specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or § 365(c) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

<u>Application No.</u>	<u>Filed (Day/Mo./Yr.)</u>	<u>Status</u> (Patented, Pending, Abandoned)
09/323,680	02/06/99	Pending

I hereby appoint the practitioners associated with the firm and Customer Number provided below to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, and direct that all correspondence be addressed to the address associated with that Customer Number:

KAREN MULLEN ZAVIS
~~FITZPATRICK, CELLA, HARPER & SCINTO~~
Customer Number: 05814 27160

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of Sole or First Inventor RON DEMBO

Inventor's signature [Signature]

Date _____

Citizen/Subject of Canada

Residence Canada

Post Office Address 398 Markham Street, Toronto, Ontario, Canada M6G 2K9

COMBINED DECLARATION AND POWER OF ATTORNEY
FOR PATENT APPLICATION

(Page 2)

Full Name of Second Joint Inventor, if any Alon ADAR

Third Inventor's signature _____

Date Nov 24, 2000

Citizen/Subject of Canada

Residence Canada

Post Office Address 291 Rushton Road, Toronto, Ontario, Canada, M6C 2X8

Full Name of Third Joint Inventor, if any Neil Edward BARTLETT

Fourth Inventor's signature _____

Date 24 Nov 2000

Citizen/Subject of Canada

Residence Canada

Post Office Address 205 Clontar Avenue, Toronto, Ontario, Canada, M6P 2W9

Full Name of Fourth Joint Inventor, if any Brian PARKINSON

Fourth Inventor's signature _____

Date NOVEMBER 22/2000

Citizen/Subject of Canada

Residence Canada

Post Office Address 10 Alma Avenue, Toronto, Ontario, Canada M6J 1N2

Full Name of Fifth Joint Inventor, if any David PENNY

Fourth Inventor's signature _____

Date Dec. 20, 2000

Citizen/Subject of Canada

Residence Canada

Post Office Address 187 Woburn Avenue, Toronto, Ontario, Canada, M5M 1K8

Full Name of Sixth Joint Inventor, if any Michael ZERBS

Second Inventor's signature _____

Date NOVEMBER 22/2000

Citizen/Subject of Austria

Residence Canada

Post Office Address 369 Calvert Road, Markham, Ontario, Canada, L6C 1X7